

Amendments to the Claims:

This listing of claims replaces all prior versions and listings of claims in the application:

Listing of Claims:

1. (Previously Presented) A user identity authentication system comprising:
  - a mobile information communication device;
  - a liquid crystal display device provided in said mobile information communication device, and including a pixel portion having a plurality of pixels, each of said pixels comprising:
    - a pixel thin film transistor having a source region, a drain region and a gate electrode;
    - a source signal line connected to the source region;
    - a liquid crystal element and a storage capacitor connected to the drain region;
    - a gate signal line connected to the gate electrode; and
    - a capacitance line connected to the storage capacitor, and
  - an image sensor built in said liquid crystal display device, said image sensor comprising:
    - a first thin film transistor having a first source region, a first drain region and a first gate electrode;
    - a sensor gate signal line connected to the first gate electrode;
    - a sensor output wiring connected to one of the first source and drain regions;
    - a second thin film transistor having a second source region, a second drain region and a second gate electrode;
    - a reset gate signal line connected to the second gate electrode; and
    - a sensor power source line connected to the second drain region,
- wherein said image sensor reads individual information of a user, and a user's identity is authenticated based on the individual information.

2. (Previously Presented) A user identity authentication system according to claim 1, wherein the image sensor is constructed of photo diodes provided for respective pixels.

3. (Previously Presented) A user identity authentication system comprising:  
a liquid crystal display device comprising a built-in image sensor, said liquid crystal display device having a pixel portion and a sensor portion including:  
a pixel thin film transistor having a source region, a drain region and a gate electrode;  
a source signal line connected to the source region;  
a liquid crystal element and a storage capacitor connected to the drain region;  
a gate signal line connected to the gate electrode; and  
a capacitance line connected to the storage capacitor,  
the built-in image sensor comprising:  
a first thin film transistor having a first source region, a first drain region and a first gate electrode;  
a sensor gate signal line connected to the first gate electrode;  
a sensor output wiring connected to the one of the first source and drain regions;  
a second thin film transistor having a second source region, a second drain region and a second gate electrode;  
a reset gate signal line connected to the second gate electrode; and  
a sensor power source line connected to the second drain region,  
a storage device; and  
a module for comparing individual information read by said image sensor with individual information stored in said storage device.

4. (Previously Presented) A user identity authentication system according to claim 3, wherein the module for comparing is configured for judging whether the user can be identified or not by comparing individual information read by said image sensor with individual information stored in said storage device.

5. (Original) A user identity authentication system according to claim 2, wherein said liquid crystal display device is a reflection type liquid crystal display device.

6. (Original) A user identity authentication system according to claim 4, wherein said liquid crystal display device is a reflection type liquid crystal display device.

7. (Previously Presented) A user identity authentication system according to claim 2, wherein said mobile information communication device comprises an operation key and is configured to provide an operation of authenticating the user's identity by manipulating the operation key.

8. (Original) A user identity authentication system according to claim 2, wherein an operation key on said mobile information communication device can be manipulated by only a dominant hand of an user.

9. (Original) A user identity authentication system according to claim 7, wherein said operation key can be manipulated by only a forefinger of said user.

10. (Original) A user identity authentication system according to claim 7, wherein said operation key can be manipulated by only a thumb of said user.

11. (Previously Presented) A user identity authentication system according to claim 4, wherein an operation of authenticating the user's identity is performed by manipulating an operation key on said mobile information communication device.

12. (Original) A user identity authentication system according to claim 4, wherein an operation key on said mobile information communication device can be manipulated by only a dominant hand of an user.

13. (Original) A user identity authentication system according to claim 11, wherein said operation key can be manipulated by only a forefinger of said user.

14. (Original) A user identity authentication system according to claim 11, wherein said operation key can be manipulated by only a thumb of said user.

15. (Previously Presented) A user identity authentication system according to claim 2, wherein said mobile information communication device comprises a power source and is configured to provide authentication of said user's identity simultaneously with switching on the power source of said mobile information communication device.

16. (Previously Presented) A user identity authentication system according to claim 4, wherein said mobile information communication device comprises a power source and is configured to provide authentication of said user's identity simultaneously with switching on the power source of said mobile information communication device.

17. (Previously Presented) A user identity authentication system according to claim 2, wherein one or both of a palm print (palm lines) and/or a fingerprint comprises said individual information.

18. (Previously Presented) A user identity authentication system according to claim 4, wherein one or both of a palm print (palm lines) and/or a fingerprint comprises said individual information.

19. (Previously Presented) A user identity authentication system according to claim 2, wherein said individual information comprises one or both of a palm print of a whole palm or a part of a palm.

20. (Previously Presented) A user identity authentication system according to claim 4, wherein said individual information comprises one or both of a palm print of a whole palm or a part of a palm is used.

21. (Previously Presented) A user identity authentication system comprising:  
a mobile information communication device;  
a liquid crystal display device provided in said mobile information communication device, and including a pixel portion having a plurality of pixels, each of said pixels comprising:  
a pixel thin film transistor having a source region, a drain region and a gate electrode;  
a source signal line connected to the source region;  
a liquid crystal element and a storage capacitor connected to the drain region;  
a gate signal line connected to the gate electrode; and  
a capacitance line connected to the storage capacitor, and  
an image sensor built in said liquid crystal display device, said image sensor comprising:  
a first thin film transistor having a first source region, a first drain region and a first gate electrode;  
a sensor gate signal line connected to the first gate electrode;  
a sensor output wiring connected to one of the first source and drain regions;  
a second thin film transistor having a second source region, a second drain region and a second gate electrode;  
a reset gate signal line connected to the second gate electrode; and  
a sensor power source line connected to the second drain region,  
wherein said image sensor reads individual information of a user, and said individual information is transmitted via the Internet.

22. (Previously Presented) A user identity authentication system of claim 21, wherein said individual information is transmitted via the Internet only when necessary, in accordance with a transmission necessity judged based on a degree of requirement set in said mobile information communication device or a destination terminal of communication.

23. (Previously Presented) A user identity authentication system comprising:  
a liquid crystal display device including a built-in image sensor, said liquid crystal display device having a pixel portion and a sensor portion including:  
a pixel thin film transistor having a source region, a drain region and a gate electrode;  
a source signal line connected to the source region;  
a liquid crystal element and a storage capacitor connected to the drain region;  
a gate signal line connected to the gate electrode; and  
a capacitance line connected to the storage capacitor,  
the built-in image sensor comprising:  
a first thin film transistor having a first source region, a first drain region and a first gate electrode;  
a sensor gate signal line connected to the first gate electrode;  
a sensor output wiring connected to one of the first source and drain regions;  
a second thin film transistor having a second source region, a second drain region and a second gate electrode;  
a reset gate signal line connected to the second gate electrode; and  
a sensor power source line connected to the second drain region,  
a storage device;  
a module for judging whether the user can be identified or not by comparing individual information read by said image sensor with individual information stored in said storage device;  
and  
a module for transmitting a result of the authentication via the Internet.

24. (Original) A user identity authentication system according to claim 22, wherein said liquid crystal display device is a reflection type liquid crystal display device.

25. (Original) A user identity authentication system according to claim 23, wherein said liquid crystal display device is a reflection type liquid crystal display device.

26. (Previously Presented) A user identity authentication method using a mobile information communication device provided with a liquid crystal display device comprising a built-in image sensor, said method comprising:

a step of reading individual information of a user with said image sensor; and  
a step of authenticating a user's identity based on said individual information,  
wherein the liquid crystal device having a first and a second front lights is capable of displaying a image and reading the individual information by the built-in image sensor, and  
wherein the first and second front lights are not lit up simultaneously, and are operated alternately corresponding to a time when displaying the image and when reading the individual information.

27. (Previously Presented) A user identity authentication method according to claim 26, wherein the image sensor comprises photo diodes provided for respective pixels.

28. (Original) A user identity authentication method according to claim 27, wherein said liquid crystal display device is a reflection type liquid crystal display device.

29. (Previously Presented) A user identity authentication method according to claim 27, further comprising authenticating the user's identity by manipulating an operation key on said mobile information communication device.

30. (Original) A user identity authentication method according to claim 27, wherein an operation key on said mobile information communication device can be controlled by only a dominant hand of said user.

31. (Original) A user identity authentication method according to claim 27, wherein said operation key can be controlled by only a forefinger of said user.

32. (Original) A user identity authentication method according to claim 27, wherein said operation key can be controlled by only a thumb of said user.

33. (Original) A user identity authentication method according to claim 27, wherein authentication of said user's identity is triggered simultaneously by switching on a power source of said mobile information communication device.

34. (Previously Presented) A user identity authentication method according to claim 27, wherein one or both of a palm print (palm lines) and/or a fingerprint comprises said individual information.

35. (Previously Presented) A user identity authentication method according to claim 27, wherein said individual information comprises one or both of a palm print of said whole palm or a part of a palm.

36. (Previously Presented) A user identity authentication method using a mobile information communication device provided with a liquid crystal display device comprising a built-in image sensor, said method comprising:

a step of reading individual information of a user with said image sensor; and

a step of transmitting said individual information via the Internet,

wherein the liquid crystal device having a first and a second front lights is capable of displaying a image and reading the individual information by the built-in image sensor, and

wherein the first and second front lights are not lit up simultaneously, and are operated alternately corresponding to a time when displaying the image and when reading the individual information.

37. (Previously Presented) A user identity authentication method according to claim 36 further comprising:



a step of judging whether or not said individual information needs to be transmitted in accordance with a degree of requirement set in said mobile information communication device or a destination terminal of communication; and  
transmitting said individual information via the Internet only when necessary.

38. (Original) A user identity authentication method according to claim 37, wherein said liquid crystal display device is a reflection type liquid crystal display device.

39. (Canceled)

40. (Previously Presented) A mobile telephonic device comprising:  
a liquid crystal display device comprising photo diodes provided for respective pixels, a flash memory, and including a pixel portion having a plurality of pixels, each of said pixels comprising:

a pixel thin film transistor having a source region, a drain region and a gate electrode;

a source signal line connected to the source region;

a liquid crystal element and a storage capacitor connected to the drain region;

a gate signal line connected to the gate electrode; and

a capacitance line connected to the storage capacitor,

an image sensor constructed of said photo diodes, said image sensor comprising:

a first thin film transistor having a first source region, a first drain region and a first gate electrode;

a sensor gate signal line connected to the first gate electrode;

a sensor output wiring connected to one of the first source and drain regions;

a second thin film transistor having a second source region, a second drain region and a second gate electrode;

a reset gate signal line connected to the second gate electrode; and

a sensor power source line connected to the second drain region, and

a means for collating individual information read by said image sensor with user's individual information stored in said flash memory.

41. (Original) A mobile telephonic device according claim 40, wherein said liquid crystal display device is a reflection type liquid crystal display device.